

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented): A method for evaluating plane equations on a patch of pixels, comprising the actions of:

evaluating the plane equations at a base location which is not external to the patch; and

computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

2. (original): The method of claim 1, wherein said base location is on the patch's boundary.

3. (original): A parallelized method for evaluating plane equations on a patch of pixels, comprising the actions of:

converting the plane equations to a format in which x and y coordinates are referenced to a base location which is within one patch width from the patch being tested; and

computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

4. (previously presented): A parallelized method for rapidly testing membership of pixels in a fragment, comprising the steps of:

- (a.) defining half-plane membership functions with reference to a base point which is not outside the fragment;
 - (b.) evaluating said membership functions at a respective base location which is not external to the fragment; and
 - (c.) clamping extreme values of said membership functions.

5. (previously presented): A parallelized method for rapidly testing membership of patches of pixels, comprising the steps of:

- (a.) defining half-plane membership functions with reference to a base point which is not outside a respective patch;
 - (b.) evaluating said membership functions in parallel, for pixels of said patch; and
 - (c.) clamping extreme values of said membership functions.

6. (currently amended): [[The method of claim 4,]] A parallelized method for rapidly testing membership of pixels in a fragment, comprising the steps of:

- (a.) defining half-plane membership functions with reference to a base point which is not outside the fragment;
 - (b.) evaluating said membership functions at a respective base location which is not external to the fragment; and
 - (c.) clamping extreme values of said membership functions;

wherein said clamping step limits dynamic range of said membership functions to less than 10 bits.

7. (currently amended): [[The method of claim 5,]] A parallelized method for rapidly testing membership of patches of pixels, comprising the steps of:

- (a.) defining half-plane membership functions with reference to a base point which is not outside a respective patch;
- (b.) evaluating said membership functions in parallel, for pixels of said patch; and
- (c.) clamping extreme values of said membership functions;

wherein said clamping step limits dynamic range of said membership functions to less than 10 bits.

8. (previously presented): The method of claim 1, wherein said plane equations are two-dimensional plane equations.

9. (previously presented): The method of claim 1, wherein said patch of pixels holds 16 texels.

10. (previously presented): The method of claim 3, wherein said plane equations are two-dimensional plane equations.

11. (previously presented): The method of claim 3, wherein said patch of pixels holds 16 texels.

12. (previously presented): The method of claim 5, wherein said patch of pixels holds 16 texels.

13. (previously presented): A computer graphics system for evaluating plane equations on a patch of pixels, the graphics system comprising:

means for evaluating the plane equations at a base location which is not external to the patch; and

means for computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

14. (previously presented): The system of claim 13, wherein said base location is on the patch's boundary.

15. (previously presented): The system of claim 13, wherein said plane equations are two-dimensional plane equations.

16. (previously presented): The system of claim 13, wherein said patch of pixels holds 16 texels.

17. (previously presented): A computer graphics system for parallelized evaluation of plane equations on a patch of pixels, the graphics system comprising:

means for converting the plane equations to a format in which x and y coordinates are referenced to a base location which is within one patch width from the patch being tested; and

means for computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

18. (previously presented): The system of claim 17, wherein said base location is not external to the patch being tested.

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19. (previously presented): The system of claim 17, wherein said base location is within the patch being tested.

20. (previously presented): The system of claim 17, wherein said plane equations are two-dimensional plane equations.

21. (previously presented): The system of claim 17, wherein said patch of pixels holds 16 texels.

22. (previously presented): A computer graphics system for parallelized, rapid testing of membership of pixels in a fragment, the graphics system comprising:
means for defining half-plane membership functions with reference to a base point which is not outside the fragment;
means for evaluating said membership functions at a respective base location which is not external to the fragment; and
means for clamping extreme values of said membership functions.

23. (currently amended): [[The system of claim 22,]] A computer graphics system for parallelized, rapid testing of membership of pixels in a fragment, the graphics system comprising:

means for defining half-plane membership functions with reference to a base point which is not outside the fragment;
means for evaluating said membership functions at a respective base location which is not external to the fragment; and
means for clamping extreme values of said membership functions;
wherein said means for clamping limits dynamic range of said membership functions to less than 10 bits.

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24. (previously presented): A computer graphics system for parallelized, rapid testing of membership of patches of pixels, comprising:

means for defining half-plane membership functions with reference to a base point which is not outside a respective patch;

means for evaluating said membership functions in parallel, for pixels of said patch; and

means for clamping extreme values of said membership functions.

25. (**currently amended**): [[The system of claim 24,]] A computer graphics system for parallelized, rapid testing of membership of patches of pixels, comprising:

means for defining half-plane membership functions with reference to a base point which is not outside a respective patch;

means for evaluating said membership functions in parallel, for pixels of said patch; and

means for clamping extreme values of said membership functions;

wherein said means for clamping limits dynamic range of said membership functions to less than 10 bits.

26. (previously presented): The system of claim 24, wherein each patch of pixels holds 16 texels.